

## WHAT IS CLAIMED IS:

1. A process for producing a non-toxic aromatic oil having  
5 less than one mutagenicity index comprising the steps of:

pre-blending an extract from a lube plant and a  
distillate in a feed tank; and

hydrotreating said pre-blend feed in the next stage.

2. A process for producing a non-toxic aromatic oil having a  
10 mutagenicity index of less than one comprising the steps  
of:

mixing a suitable grade, calculated amount of an  
extract stream to a distillate stream of desired  
properties; and

15 treating said pre-blend feed in a hydrotreater.

3. The process of Claim 1 wherein said extract is selected  
from the group consisting of different cuts of extracts  
of a lube plant.

4. The process of Claim 1 wherein said distillate is  
20 selected from the group consisting of different cuts of  
distillates of a vacuum distillation unit.

5. The process of Claim 1 wherein the proportion of said  
extract component to said distillate in said pre-blend is  
in the range of 1-99 %.

6. The process of Claim 5 wherein the proportion of said extract component in said pre-blend is in the range of 1 - 50%.

7. The process of Claim 1 wherein said hydrogenation of said feed uses an appropriate hydrotreating catalyst selected for example from the group consisting of Nickel-Molybdenum and Nickel-Cobalt.

8. The process of Claim 1 wherein said hydrotreating process is performed at a pressure in the range of 400-3000 psi, and at a temperature in the range of 400-800 °F.

9. The process of Claim 8 wherein said hydrotreating process is performed at a pressure in the range of 900-1200 psi, and at a temperature in the range of 400-800 °F.

10. The process of Claim 8 wherein said hydrotreating process is performed at a pressure in the range of 400-3000 psi, and at a temperature in the range of 510-610 °F.

11. The process of Claim 1 wherein said hydrotreating process is performed at a pressure in the range of 900-1200 psi, and at a temperature in the range of 510-610 °F.